

Preamble

An Asterisk (*) throughout this document denotes legal authority, limitations and conditions which are not federally enforceable.

Concurrent Permit Actions Performed as Part of the Review and Issuance of Permit 05-JAJ-015.

Construction Permits Issued in Conjunction with Permit 05-JAJ-015 Under s. 285.61(8), Wis. Stats.: None.

Revised Construction Permits Issued in Conjunction with Permit 05-JAJ-015 Under s. NR 406.11, Wis. Adm. Code: None.

Operation (CONOP) Permits Issued in Conjunction with Permit 05-JAJ-015 Under s. 285.62(7)(b), Wis. Stats.: None.

Revised Operation Permits Issued in Conjunction with Permit 05-JAJ-015 Under ss. NR 407.11, 407.12, 407.13 and/or 407.14, Wis. Adm. Code: None.

The following permits, orders, etc., are adopted, under ss. 285.65(3), Wis. Stats., NR 406.11(1)(c) and (d), NR 407.09(2)(d) and NR 407.15(3) and (4), Wis. Adm. Code, by Permit 05-JAJ-015 which then becomes the primary enforceable document: None.

Stack and Process Index.

1. P14 / S14 – Raw Silo #1
2. P15 / S15 – Raw Silo #2
3. P## / C20 / S20: P13 – Elevator #1, P16 – Conveyor #2, P17 – Elevator #2, P21 – Day Tank #1, P22 – Day Tank #2, P23 – Weigh Hopper #1, P24 – Raw Material Heater, P25 – Cyclone, P27 – Elevator #3, P28 – Resin Tank, P29 – Weigh Hopper #2, P41 – Shaker Screen, P42 – Elevator #4, P43 – Scalping Screen, P44 – Product Cooler, P45 – Conveyor #3, P46 – Elevator #5, P47 – Finished Silo #1, P48 – Finished Silo #2, P49 – Weigh Belt, and P71 – Finished Silo #3
4. P## / C50 / S50: P51 – Batch Mixer, P52 – Continuous Mixer, P53 – Sludge Tank #1, P54 – Surge Tank, Storage Tank T31 – Hexa Tank #1, and Storage Tank T32 – Hexa Tank #2
5. F11 / P11 – Railcar Unloading
6. F61 / P61 – Railcar Loading

Permit Shield - Unless precluded by the Administrator of the USEPA, compliance with all emission limitations in this operation permit is considered to be compliance with all emission limitations established under ss. 285.01 to 285.87, Wis. Stats., and emission limitations under the federal clean air act, that are applicable to the source if the permit includes the applicable limitation or if the Department determines that the emission limitations do not apply. The following emission limitations were reviewed in the analysis and preliminary determination and were determined not to apply to this stationary source: None.

Part I -- The headings for the areas in the permit are defined below. The legal authority for these limitations or methods follows them in [brackets].

Pollutant -- This area will note which pollutant is being regulated by the permit.

Limitations -- This area will list all applicable emission limitations that apply to the source, including case-by-case limitations such as Latest Available Control Techniques (LACT), Best Available Control Technology (BACT), or Lowest Achievable Emission Rate (LAER). It will also list any voluntary restrictions on hours of operation, raw material use, or production rate requested by the permittee to limit potential to emit.

Compliance Demonstration -- The compliance demonstration methods outlined in this area may be used to demonstrate compliance with the associated emission limit or work practice standard listed under the corresponding *Limitations* column. The compliance demonstration area contains limits on parameters or other mechanisms that will be monitored periodically to ensure compliance with the limitations. The requirement to test as well as initial and periodic test schedules, if testing is required, will be stated here. Notwithstanding the compliance determination methods which the owner or operator of a source is authorized to use under ch. NR 439, Wis. Adm. Code, the Department may use any relevant information or appropriate method to determine a source's compliance with applicable emission limitations.

Reference Test Methods, Recordkeeping, and Monitoring Requirements -- Specific USEPA Reference test methods or other approved test methods will be contained in this area and are the methods that must be used whenever testing is required. A reference test method will be listed even if no testing is immediately required. Also included in this area are any recordkeeping requirements and their frequency and reporting requirements. Accuracy of monitoring equipment shall meet, at a minimum, the requirements of s. NR 439.055(3) and (4), Wis. Adm. Code, as specified in Part II of this permit.

Condition Type -- This area will specify other conditions that are applicable to the entire facility that may not be tied to one specific pollutant.

Conditions -- Specific conditions usually applicable to the entire facility or compliance requirements.

Compliance Demonstration -- This area contains monitoring and testing requirements and methods to demonstrate compliance with the conditions.

PART II -- This section contains the general limitations that the permittee must abide by. These requirements are standard for most sources of air pollutants so they are included in this section with every permit.

AIR POLLUTION CONTROL CONSTRUCTION PERMIT

EI FACILITY NO: 627005280

PERMIT NO.: 05-JAJ-015

STACK NOS. F11, F61, S14, S15, S20, S50 SOURCE NOS. P11, P13, P14, P15, P16, P17, P21, P22,
P23, P24, P25, P27, P28, P29, P41, P42,
P43, P44, P45, P46, P47, P48, P49, P51,
P52, P53, P54, P61, P71, T31, T32

This Construction Permit Expires Eighteen (18) Months From the Date of Issuance or When the Operation Permit is Issued for the Emission Units Included in This Permit, Whichever Comes First.

This Operation Permit Expires Sixty (60) Months from the Date of Issuance.

In compliance with the provisions of Chapter 285, Wis. Stats., and Chapters NR 400 to NR 499, Wis. Adm. Code,

Name of Source: Atlas Resin Proppants LP

Street Address: N7500 County Road P,
Taylor, Jackson County, Wisconsin

Responsible Official, & Title: Stephen R Horn, Vice Chairman

is authorized to construct a resin-coated sand or ceramic pellets production facility described in the plans and specifications dated 01/19/05, 01/20/05, 01/21/05, 01/27/05, 01/28/05, and 01/31/05 in conformity with the conditions herein.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Wisconsin Rapids, Wisconsin March 30, 2005

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By /s/ Tom Woletz, for
Joseph E. Ancel
Air Team Supervisor, West Central Region

PART I**A. Process P14, Stack S14 – Raw Silo #1.**

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
|---------------------------------|---|--|--|
| 1. Particulate Matter Emissions | <p>(1) Emissions may not exceed 0.10 pounds per hour. ¹ [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code]</p> <p>(2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) Stack height shall be at least 60 feet above ground level. [s. 285.65(3), Wis. Stats., and s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The stack outlet diameter may not be greater than 6 inches. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]</p> <p>(c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]</p> | <p>(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> | <p>(1) Reference Test Method for Particulate Matter Emissions: whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> |
| 2. Visible Emissions | <p>(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code]</p> | <p>(1) The requirements in I.A.1.b. and I.A.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> | <p>(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> |

¹ The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

B. Process P15, Stack S15 – Raw Silo #2.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
|---------------------------------|---|--|--|
| 1. Particulate Matter Emissions | <p>(1) Emissions may not exceed 0.10 pounds per hour. ² [ss. NR 415.05(1)(o) and 415.05(2), Wis. Adm. Code]</p> <p>(2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) Stack height shall be at least 60 feet above ground level. [s. 285.65(3), Wis. Stats., and s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The stack outlet diameter may not be greater than 6 inches. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]</p> <p>(c) The stack may not be equipped with a rainhat or other device which impedes the horizontal flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]</p> | <p>(1) The panel filter control device shall be in line and shall be operated at all times when the process is in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> | <p>(1) Reference Test Method for Particulate Matter Emissions: whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> |
| 2. Visible Emissions | <p>(1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code]</p> | <p>(1) The requirements in I.B.1.b. and I.B.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code]</p> | <p>(1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code]</p> |

² The 0.10 pounds per hour emission limit is based on 0.40 pounds of particulate per 1,000 pounds of gas, for: 56 acfm, ambient exhaust temperature, and 0.02% moisture. This emission limit is more restrictive than the allowable emission limit of 38.6 pounds per hour calculated from the process weight rate equation in s. NR 415.05(2), Wis. Adm. Code, for a process weight rate of 150 tons per hour.

C. Processes P13 - Elevator #1, P16 - Conveyor #2, P17 - Elevator #2, P21 - Day Tank #1, P22 - Day Tank #2, P23 - Weigh Hopper #1, P24 - Raw Material Heater, P25 - Cyclone, P27 - Elevator #3, P28 - Resin Tank, P29 - Weigh Hopper #2, P41 - Shaker Screen, P42 - Elevator #4, P43 - Scalping Screen, P44 - Product Cooler, P45 - Conveyor #3, P46 - Elevator #5, P47 - Finished Silo #1, P48 - Finished Silo #2, P49 - Weigh Belt, and P71 - Finished Silo #3, Control Device C20, Stack S20.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
|---------------------------------|--|---|---|
| 1. Particulate Matter Emissions | <p>(1) Emissions may not exceed 1.9 pounds per hour.³ [ss. NR 404.08(2) and NR 415.05(1)(m) or 415.05(2), Wis. Adm. Code]</p> <p>(2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) Stack height shall be at least 16 feet above ground level. [s. 285.65(3), Wis. Stats., and s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The stack outlet diameter may not be greater than 2 feet 6 inches. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]</p> <p>(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow</p> | <p>(1) The baghouse control device shall be in line and shall be operated at all times when the processes are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) Instrumentation to monitor the pressure drop across the baghouse control device shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p> <p>(3) The pressure drop across the baghouse control device shall be maintained between 1 and 8 inches water column, or an alternative range approved in writing by the Department. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> | <p>(1) Reference Test Method for Particulate Matter Emissions: whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensible backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) The permittee shall record the pressure drop across the baghouse once for every 8 hours of operation or once per day, whichever yields the greater number of measurements. [s. NR 439.055(2)(b)1., Wis. Adm. Code]</p> <p>(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the baghouse system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> |

³ The 1.9 pounds per hour emission limit is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 10.31 pounds per hour calculated from the from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code. The emission rate determined using the process weight equation is less restrictive than the emission limit calculated from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code.

- C. Processes P13 - Elevator #1, P16 - Conveyor #2, P17 - Elevator #2, P21 - Day Tank #1, P22 - Day Tank #2, P23 - Weigh Hopper #1, P24 - Raw Material Heater, P25 - Cyclone, P27 - Elevator #3, P28 - Resin Tank, P29 - Weigh Hopper #2, P41 - Shaker Screen, P42 - Elevator #4, P43 - Scalping Screen, P44 - Product Cooler, P45 - Conveyor #3, P46 - Elevator #5, P47 - Finished Silo #1, P48 - Finished Silo #2, P49 - Weigh Belt, and P71 - Finished Silo #3, Control Device C20, Stack S20.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
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| | of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code] | | (5) The baghouse control device pressure drop monitoring device shall be maintained in accordance with the manufacturer's recommendations and shall be calibrated at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code] |
| 2. Visible Emissions | (1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code] | (1) The requirements in I.C.1.b. and I.C.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code] | (1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code] |

D. Processes P51 - Batch Mixer, P52 - Continuous Mixer, P53 - Sludge Tank #1, and P54 - Surge Tank, Storage Tank T31 - Hexa Tank #1, and Storage Tank T32 - Hexa Tank #2, Control Device C50, Stack S50.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
|---------------------------------|---|--|--|
| 1. Particulate Matter Emissions | <p>(1) Emissions may not exceed 1.5 pounds per hour.⁴ [ss. NR 404.08(2) and NR 415.05(1)(m) or 415.05(2), Wis. Adm. Code]</p> <p>(2) Stack Parameters: These requirements are included because the source was reviewed with these stack parameters and it was determined that no increments or ambient air quality standards will be violated when constructed as proposed.</p> <p>(a) Stack height shall be at least 75 feet above ground level. [s. 285.65(3), Wis. Stats., and s. NR 406.10, Wis. Adm. Code]</p> <p>(b) The stack outlet diameter may not be greater than 2 feet. [s. 285.65(3), Stats. and s. NR 406.10, Wis. Adm. Code]</p> <p>(c) The stack may not be equipped with a rainhat or other device which impedes the upward flow of the exhaust gases. [s. 285.65(3), Stats. and s. NR 406.10,</p> | <p>(1) The wet scrubber control device, including demister, shall be in line and shall be operated at all times when the processes are in operation. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) Instrumentation to monitor the pressure drop across the wet scrubber and demister, in inches of water column, shall be installed and operated properly. [s. NR 439.055(1)(a), Wis. Adm. Code]</p> <p>(3) Instrumentation to monitor the wet scrubber liquor flow, in gallons per minute, shall be installed and operated properly. [s. NR 439.055(1)(e), Wis. Adm. Code]</p> <p>(4) Instrumentation to monitor the pH of the wet scrubber absorbing fluid shall be installed and operated properly. [s. NR 439.055(1)(f), Wis. Adm. Code]</p> <p>(5) The pressure drop across the wet scrubber and demister shall be maintained between 6 and 12 inches water column, or an alternative range approved in writing by the</p> | <p>(1) Reference Test Method for Particulate Matter Emissions: whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17 including condensable backhalf emissions (U.S. EPA Method 202). [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) The permittee shall keep and maintain on site technical drawings, blueprints or equivalent records of the physical stack parameters. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(3) Except as provided under (d), the permittee shall measure and record the following operational variables once for every 8 hours of operation or once per day, whichever yields the greater number of measurements:</p> <p>(a) Pressure drop across the wet scrubber and demister, in inches of water column,</p> <p>(b) Flow of liquor, in gallons per minute, and</p> <p>(c) pH of the absorption scrubbing fluid.</p> |

⁴ The 1.5 pounds per hour emission limit is based on modeling and is included in the permit to protect the National Ambient Air Quality Standards (NAAQS). This emission limit is more restrictive than the allowable emission limit of 5.18 pounds per hour calculated from the from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code. The emission rate determined using the process weight equation is less restrictive than the emission limit calculated from 0.2 pounds per 1,000 pounds of exhaust gas limit in s. NR 415.05(1)(m), Wis. Adm. Code.

D. Processes P51 - Batch Mixer, P52 - Continuous Mixer, P53 - Sludge Tank #1, and P54 - Surge Tank, Storage Tank T31 - Hexa Tank #1, and Storage Tank T32 - Hexa Tank #2, Control Device C50, Stack S50.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
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| | Wis. Adm. Code] | <p>Department. [s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(6) The solids content of recirculated scrubber water shall be maintained at a level to assure compliance with I.D.1.a.(1). The operational range for the solids content shall be established during the initial operation period. [s. 285.65(4), Wis. Stats., and s. NR 407.09(4), Wis. Adm. Code]</p> <p>(7) The permittee shall use a method approved by the Department in writing, to monitor the solids content of the recirculated scrubber water as required by I.D.1.c.(3). [s. 285.65(4), Wis. Stats., and s. NR 407.09(4), Wis. Adm. Code]</p> <p>(8) Compliance emission tests shall be conducted within 90 days after the start of initial operation to determine the PM emission rate while operating at 100% capacity. If the compliance emission tests cannot be conducted within 90 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07, Wis. Adm. Code]</p> | <p>(d) The solids content of the recirculated scrubber water shall be measured and recorded at least once per day. [s. NR 439.055(2)(b), Wis. Adm. Code, and s. 285.65(4), Wis. Stats.]</p> <p>(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the wet scrubber system, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(5) The wet scrubber pressure drop, liquor flow, and pH monitoring devices shall be maintained in accordance with the manufacturer's recommendations and shall be calibrated at least once per year. [s. NR 439.11(1)(b) and s. NR 439.055(4), Wis. Adm. Code]</p> |

D. Processes P51 - Batch Mixer, P52 - Continuous Mixer, P53 - Sludge Tank #1, and P54 - Surge Tank, Storage Tank T31 - Hexa Tank #1, and Storage Tank T32 - Hexa Tank #2, Control Device C50, Stack S50.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
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| 2. Visible Emissions | (1) Emissions of shade or density may not exceed number 1 of the Ringlemann chart or 20% opacity. [s. NR 431.05, Wis. Adm. Code] | (1) The requirements in I.D.1.b. and I.D.1.c. shall be used to demonstrate compliance with the visible emissions limit. [s. NR 407.09(4)(a)3.b., Wis. Adm. Code] | (1) Reference Test Method for Visible Emissions: Whenever visible emission testing is required, the permittee shall use U.S. EPA Method 9. [s. NR 439.06(9)(a)1., Wis. Adm. Code] |
| 3. Volatile Organic Compounds | <p>(1) Latest Available Control Techniques and operating practices demonstrating best current technology (LACT).</p> <p>(a) The permittee has demonstrated that 85% control of VOC emissions leaving the wet scrubber is technologically infeasible for the process line, and so shall use LACT. [s. NR 424.03(2)(c), Wis. Adm. Code]</p> <p>(b) LACT is defined as the following process operation practices and limitations:</p> <ol style="list-style-type: none"> The facility shall operate the wet scrubber at all times the processes P51-54, T31, and T32 are operational, with monitoring of parameters: pressure differential, liquor flow rate, and pH of the scrubbing fluid. The wet scrubber shall achieve one of the following: <ol style="list-style-type: none"> An overall control efficiency of 64% for VOC emissions, or VOC emission rate no greater | <p>(1) The facility shall operate the wet scrubber at all times the processes are operating. [s. NR 406.10 and s. NR 407.09(4)(a)1., Wis. Adm. Code]</p> <p>(2) As required under I.D.1.b.(2)-(4).</p> <p>(3) The pressure drop across the wet scrubber and demister, the liquor flow rate, and the pH of the scrubbing fluid shall be maintained per manufacturer specifications, the most recent compliance test, or the malfunction prevention and abatement plan required under I.F.2., to meet the requirements under I.D.3.a.(1)(b) and I.D.1.a.(1). These operational ranges shall be established during the initial operation period. [s. NR 419.03(1), Wis. Adm. Code, and s. 285.65(7), Wis. Stats.]</p> <p>(4) Compliance emission tests shall be conducted within 90 days after the start of initial operation to determine the VOC control efficiency or the VOC emission rate while operating at 100% capacity. If the</p> | <p>(1) Whenever VOC compliance testing is required, USEPA Method 18, 25 or 25A, or another method approved by the Department in writing shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(3), Wis. Adm. Code]</p> <p>(2) As required under I.D.1.c.(3)-(5).</p> <p>(3) The permittee shall inspect the circulation pump and packing of the wet scrubber montly. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> <p>(4) The permittee shall keep records of all inspections, checks and any maintenance or repairs performed on the wet scrubber, containing the date of the action, initials of inspector, and the results. [s. NR 439.04(1)(d), Wis. Adm. Code]</p> |

D. Processes P51 - Batch Mixer, P52 - Continuous Mixer, P53 - Sludge Tank #1, and P54 - Surge Tank, Storage Tank T31 - Hexa Tank #1, and Storage Tank T32 - Hexa Tank #2, Control Device C50, Stack S50.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
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| | than 10.6 pounds per hour. | compliance emission tests cannot be conducted within 90 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07, Wis. Adm. Code] | |
| 4. Phenol Emissions | <p>(1) The facility may not use more than 586,417 pounds of flake resin per month, based on a 12-month rolling average (7,037,000 pounds per year). [s. 285.65(7), Wis. Stats.]</p> <p>(2) The free phenol content of the flake resin may not exceed 1.5%, by weight. [s. 285.65(7), Wis. Stats.]</p> <p>(3) The wet scrubber shall achieve one of the following:</p> <p>(a) An overall control efficiency of 64% for VOC emissions, as required under I.D.3.a.(1)(b)2.a., or</p> <p>(b) An overall control efficiency of 64% for phenol emissions. [s. 285.65(7), Wis. Stats.]</p> | <p>(1) The average monthly usage amounts of flake resin shall be determined according to the following equation:</p> $U_{avg} = [(AU_1) + (AU_2) + \dots + (AU_i)] / 12$ <p>where,</p> <p>U_{avg} = Average pounds of flake resin used per month, as an average over the previous 12 consecutive month period,</p> <p>AU_i = Actual pounds of flake resin used, in month i.</p> <p>These calculations shall be completed within ten days of the end of each calendar month.</p> <p>[s. NR 407.09(4)(a)3.b., Wis. Adm. Code, and s. 285.65(7), Wis. Stats.]</p> <p>(2) As required under I.D.3.b.(3).</p> <p>(3) Except as provided under I.D.4.b.(4), compliance emission tests shall be conducted</p> | <p>(1) Whenever Phenol compliance testing is required, NIOSH Method 2546, or another method approved by the Department in writing shall be used. When approved in writing an equivalent test method may be substituted for the required test method. [s. NR 439.06(8), Wis. Adm. Code]</p> <p>(2) The permittee shall record and maintain records of the following:</p> <p>(a) The monthly total of flake resin used each month,</p> <p>(b) The monthly average of flake resin used, according to I.D.4.b.(1), and</p> <p>(c) Material safety data sheets or other technical documents which show the free phenol content of the flake resin used. [s. NR 407.09(4)(a)1., Wis. Adm. Code, and s. 285.65(7), Wis. Stats.]</p> <p>(3) As required under I.D.1.c.(3).</p> |

D. Processes P51 - Batch Mixer, P52 - Continuous Mixer, P53 - Sludge Tank #1, and P54 - Surge Tank, Storage Tank T31 - Hexa Tank #1, and Storage Tank T32 - Hexa Tank #2, Control Device C50, Stack S50.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
|-----------|----------------|--|--|
| | | <p>within 90 days after the start of initial operation to determine the phenol control efficiency while operating at 100% capacity. If the compliance emission tests cannot be conducted within 90 days after the start of initial operation, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07, Wis. Adm. Code]</p> <p>(4) If the permittee is able to show compliance with I.D.3.a.(1)(b)2.a., an overall control efficiency of 64% for VOC emissions, then the permittee shall be considered in compliance with I.D.4.a.(3)(a), and the testing requirements under I.D.4.b.(3) are not required.</p> | |

E. Fugitive Sources F11 - Railcar Unloading, and F61 - Railcar Loading.

| Pollutant | a. Limitations | b. Compliance Demonstration | c. Reference Test Methods, Recordkeeping and Monitoring Requirements |
|-----------------------|--|--|--|
| 1. Fugitive Emissions | (1) The permittee may not cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may the permittee allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted, or demolished without taking such precautions. [s. NR 415.04(Intro.), Wis. Adm. Code] | <p>(1) No person may cause, allow or permit any materials to be handled, transported or stored without taking precautions to prevent particulate matter from becoming airborne. Nor may a person allow a structure, a parking lot, or a road to be used, constructed, altered, repaired, sand blasted or demolished without taking such precautions. [s. NR 415.04, Wis. Adm. Code]</p> <p>(2) Such precautions shall include, but not be limited to:</p> <p>(a) Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, or construction operations.</p> <p>(b) Application of asphalt, water, suitable chemicals or plastic covering on dirt roads, material stockpiles and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem.</p> <p>(c) Installation and use of hoods, fans, and air cleaning devices to enclose and vent the areas where dusty materials are handled.</p> <p>(d) Covering or securing of materials likely to become airborne while being moved on public roads, railroads or navigable waters.</p> <p>(e) Conduct of agricultural practices such as tilling of land or application of fertilizers in such manner as not to create air pollution.</p> <p>(f) The paving or maintenance of roadway areas so as not to create air pollution.</p> <p>[s. NR 415.04(1), Wis. Adm. Code]</p> | <p>(1) Reference Test Method for Particulate Matter Emissions: Whenever particulate matter emission testing is required, the permittee shall use U.S. EPA Method 5, 5A, 5B, 5D, 5E, 5F, 5G, 5H or 17. [s. NR 439.06(1), Wis. Adm. Code]</p> <p>(2) If using water or chemicals for dust control, the permittee shall record:</p> <p>(a) the date and time of the water or chemical application; and</p> <p>(b) the area(s) at the facility where water or chemicals are applied.</p> <p>[s. NR 439.04(1)(d), Wis. Adm. Code]</p> |

F. TOTAL FACILITY.

| CONDITION TYPE | a. SPECIFIC CONDITIONS |
|---|---|
| 1. Construction Permit Requirements | <p>(1) Construction Notification: The permittee shall inform the Wisconsin Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, in writing of the following for the emissions unit covered in this permit:</p> <p>(a) Notice of commencing construction shall be submitted within 15 days of the start of construction.</p> <p>(b) Notice of intent to initially operate the source(s) covered by this permit, 30 days prior to the anticipated date of initial operation.</p> <p>(c) Notice of the actual date of initial startup shall be submitted within 15 days of the initial startup.</p> <p>[s. NR 439.03(1), Wis. Adm. Code]</p> <p>(2) Construction Permit Expiration: This construction permit expires 18 months after the date of issuance. Construction or modification and an initial operation period for equipment shakedown, testing and Department evaluation of operation to assure conformity with the permit conditions is authorized for each emissions unit covered in this permit. Please note that the sources covered by this permit are required to meet all emission limits and conditions contained in the permit at all times, including during the initial operation period. If 18 months is an insufficient time period for construction or modification, equipment shakedown, testing and Department evaluation of operation, the permit holder may request and the Department may approve in writing an extension of this permit.</p> <p>[ss. 285.60(1)(a)2 and 285.66(1), Wis. Stats.; s. NR 406.12, Wis. Adm. Code]</p> <p>(3) Completion of Operation Permit Application :</p> <p>(a) Compliance information required to complete the operation permit application for the emission units included in this permit should be submitted to the DNR at least 4 months prior to the expiration of the Construction Permit.</p> <p>(b) Operation of the source(s) covered by this permit after this permit expires is prohibited unless a complete operating permit application for the source(s) has been submitted to the Department.</p> <p>[s. 285.60(1)(b)1., Wis. Stats.; s. NR 407.04(1)(b), Wis. Adm. Code]</p> |
| 2. Malfunction Prevention and Abatement Plans | <p>(1) A malfunction prevention and abatement plan shall be prepared and followed for the facility within 90 days after the start of operation of the processes. [s. NR 439.11, Wis. Adm. Code]</p> <p>(2) The facility shall submit the plan to Wisconsin Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, for review and approval. The department may amend the plan if deemed necessary for malfunction prevention or for the reduction of excess emissions during malfunctions. [s. NR 439.11(2), Wis. Adm. Code]</p> |

F. TOTAL FACILITY.

| CONDITION TYPE | a. SPECIFIC CONDITIONS |
|-------------------------------|---|
| | <p>(3) A written copy of the plan shall be kept at the plant and shall be updated as necessary, but at least once every five years. [s. NR 439.11(1), Wis. Adm. Code]</p> <p>(4) All air pollution control equipment shall be operated and maintained in conformance with good engineering practices (i.e., operated and maintained according to the manufacturer's specifications and procedures) to minimize the possibility for the exceedance of any emission limitations. [s. NR 439.11(4), Wis. Adm. Code]</p> <p>(5) The plan shall be developed to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emissions limitation to be violated or which may cause air pollution. [s. NR 439.11(1), Wis. Adm. Code]</p> <p>(6) This plan shall include installation, maintenance and routine calibration procedures for the control equipment instrumentation. This plan shall require an instrumentation calibration at the frequency specified by the manufacturer but not less than once per year plus an inspection and/or calibration whenever instrumentation anomalies are noted. [ss. NR 407.09(1)(c)1.c., NR 439.055(4) and s. NR 439.11, Wis. Adm. Code]</p> <p>(7) The plan shall require a copy of the operation and maintenance manual for the control equipment be maintained on site. The plan shall contain all of the elements in s. NR 439.11(1)(a) - (h), Wis. Adm. Code. [s. NR 439.11, Wis. Adm. Code]</p> <p>(8) The facility shall maintain an inventory of normal consumable items necessary to ensure operation of the control device in conformance with the manufacturer's specifications and recommendations. [s. NR 439.11, Wis. Adm. Code]</p> |
| 3. Stack Testing Requirements | <p>(1) All testing shall be performed while the emissions unit is operating at 100% capacity. If operation at 100% capacity is not feasible, the source shall operate at a capacity level which is approved by the Department in writing. [s. NR 439.07(1), Wis. Adm. Code]</p> <p>(2) The Department shall be informed at least 20 working days prior to any stack testing so a Department representative can witness the testing. At the time of notification a compliance emission test plan shall also be submitted to the Department for approval. When approved in writing, an equivalent test method may be substituted for the reference test method. [s. NR 439.07(2), Wis. Adm. Code]</p> <p>(3) Two copies of the report on the tests shall be submitted to the Department for evaluation within 60 days following the tests. [s. NR</p> |

F. TOTAL FACILITY.

| CONDITION TYPE | a. SPECIFIC CONDITIONS |
|--------------------------------|---|
| | <p>439.07(9), Wis. Adm. Code]</p> <p>(4) If the compliance emission test(s) cannot be conducted within the time frames specified in this permit, the permit holder may request and the Department may approve, in writing, an extension of time to conduct the test(s). [s. NR 439.07, Wis. Adm. Code]</p> |
| 4. Compliance Report / Records | <p>(1) Upon issuance of the operation permit, the permittee shall submit periodic monitoring reports. [s. NR 407.09(1)(c)3., Wis. Adm. Code]</p> <p>(a) Submit to the Wisconsin Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, an annual summary of the monitoring required by this permit, due February 1 for the period from January 1 to December 31 the previous year, each year that this permit is in effect. The content of the submittal is described in item D. of Part II of this permit. [s. NR 439.03(1)(b), Wis. Adm. Code]</p> <p>(2) Upon issuance of the operation permit, the permittee shall submit periodic compliance certification. [s. NR 407.09(4)(a)3., Wis. Adm. Code]</p> <p>(a) Submit certification of compliance with the requirements of this permit to the Wisconsin Department of Natural Resources, West Central Region Air Program, 1300 West Clairemont Box 4001, Eau Claire WI 54702-4001, phone (715) 839-3700, due February 1 for the period from January 1 to December 31 the previous year, each year that this permit is in effect. The content of the submittal is described in item N. of Part II of the operation permit. [s. NR 439.03(1)(c), Wis. Adm. Code]</p> <p>(3) The records required under this permit shall be retained for at least five years and shall be made available to department personnel upon request during normal business hours. [s. NR 422.127(4)(d), s. NR 439.04, and s. NR 439.05, Wis. Adm. Code]</p> |